```
ANSWER 322 OF 322 REGISTRY COPYRIGHT 2003 ACS
RN
     1147-65-5 REGISTRY
CN
     Benzoic acid, 2-[bis(carboxymethyl)amino]- (9CI)
                                                         (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
     Acetic acid, [(o-carboxyphenyl)imino]di- (6CI, 7CI)
CN
     Anthranilic acid, N, N-bis (carboxymethyl) - (8CI)
CN
OTHER NAMES:
CN
     ANDA
CN
     Anthranil-N,N-diacetic acid
CN
     Anthranildiacetic acid
CN
     Anthranilic-N, N-diacetic acid
     N, N-Bis (carboxymethyl) anthranilic acid
CN
CN
     N-(o-Carboxyphenyl)iminodiacetic acid
CN
     N-Carboxymethyl-N-(2-carboxyphenyl)glycine
MF
     C11 H11 N O6
CI
     COM
LC
                  BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CSCHEM, GMELIN*,
     STN Files:
       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
```

- 98 REFERENCES IN FILE CA (1957 TO DATE)
- 17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 98 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L5 ANSWER 870 OF 870 REGISTRY COPYRIGHT 2003 ACS

RN 1160-84-5 REGISTRY

CN 2,6-Piperazinedione, 4,4'-(1,3-phenylene)bis- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,6-Piperazinedione, 4,4'-m-phenylenedi- (7CI, 8CI)

OTHER NAMES:

CN Acetic acid, (m-phenylenedinitrilo)tetra-, N,N:N',N'-diimide

CN Glycine, N,N'-(1,3-phenylene)bis[N-(carboxymethyl)-, N,N:N',N'-diimide

FS 3D CONCORD

MF C14 H14 N4 O4

LC STN Files: CA, CAOLD, CAPLUS

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L1 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2003 ACS
```

RN 19360-67-9 REGISTRY

CN Benzoic acid, 4-(carboxymethoxy)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN p-Anisic acid, .alpha.-carboxy- (6CI, 7CI, 8CI)

OTHER NAMES:

CN 4-Carboxy-1-(carboxymethoxy)benzene

CN 4-Carboxyphenoxyacetic acid

FS 3D CONCORD

MF C9 H8 O5

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

36 REFERENCES IN FILE CA (1957 TO DATE)

37 REFERENCES IN FILE CAPLUS (1957 TO DATE)

9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L2
    ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN
    2245-53-6 REGISTRY
    Acetic acid, 2,2'-[1,4-phenylenebis(oxy)]bis- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Acetic acid, (p-phenylenedioxy)di- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
     1,4-Bis (carboxymethoxy) benzene
     1,4-Dicarboxymethoxybenzene
CN
     1,4-Phenylenedioxydiacetic acid
CN
     Hydroquinone-0,0-diacetic acid
CN
     3D CONCORD
FS
MF
     C10 H10 O6
CI
     COM
                  BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
LC
     STN Files:
       CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
                     EINECS**, NDSL**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

- 61 REFERENCES IN FILE CA (1957 TO DATE)
- 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 62 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
ANSWER 189 OF 190 REGISTRY COPYRIGHT 2003 ACS
L8
RN
    635-53-0 REGISTRY
    Benzoic acid, 2-(carboxymethoxy)- (9CI) (CA INDEX NAME)
CN
OTHER 'CA INDEX NAMES:
    o-Anisic acid, .alpha.-carboxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
     (2-Carboxyphenoxy) acetic acid
CN
     (o-Carboxyphenoxy) acetic acid
CN
     Acetic acid, (2-carboxyphenoxy) -
     o-(Carboxymethoxy)benzoic acid
CN
     3D CONCORD
FS
MF
     C9 H8 O5
CI
     COM
LC
     STN Files:
                  BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
       CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, RTECS*, SPECINFO, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                     NDSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

- 47 REFERENCES IN FILE CA (1957 TO DATE)
- 47 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L11 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2003 ACS

RN 64289-70-9 REGISTRY

CN 2-Naphthalenecarboxylic acid, 3-[(carboxymethyl)thio]- (9CI)

(CA INDEX NAME)

FS 3D CONCORD

MF C13 H10 O4 S

LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT

(*File contains numerically searchable property data)

- 2 REFERENCES IN FILE CA (1957 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L13 ANSWER 16 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 99059-45-7 REGISTRY

CN Benzoic acid, 2-(carboxymethylthio)-4-(methylsulfonyl)- (6CI)

(CA INDEX NAME)

FS 3D CONCORD

MF C10 H10 O6 S2

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS

(*File contains numerically searchable property data)

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 15 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 99067-28-4 REGISTRY

CN Benzoic acid, 5-bromo-2-(carboxymethylthio)- (6CI) (CA INDEX NAME)

FS 3D CONCORD

MF C9 H7 Br O4 S

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS
(*File contains numerically searchable property data)

- 2 REFERENCES IN FILE CA (1957 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 13 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 99866-05-4 REGISTRY

CN Benzoic acid, 2-(carboxymethylthio)-5-ethoxy- (6CI) (CA INDEX NAME)

FS 3D CONCORD

MF C11 H12 O5 S

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS (*File contains numerically searchable property data)

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 12 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 99988-76-8 REGISTRY

CN Propionic acid, 3-[2-(carboxymethylthio)-6-benzothiazolylthio](6CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H11 N O4 S3

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS

(*File contains numerically searchable property data)

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 10 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 100953-29-5 REGISTRY

CN Benzo[b]thiophene-2-carboxylic acid, 5-(carboxymethylthio)-3-methyl-(6CI) (CA INDEX NAME)

FS 3D CONCORD

MF C12 H10 O4 S2

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS

(*File contains numerically searchable property data)

- 1 REFERENCES IN FILE CA (1957 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 9 OF 18 REGISTRY COPYRIGHT 2003 ACS

RN 101714-12-9 REGISTRY

CN Benzoic acid, 2-(carboxymethylthio)-4-nitro- (6CI) (CA INDEX NAME)

FS 3D CONCORD

MF C9 H7 N O6 S

SR CAOLD

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS

(*File contains numerically searchable property data)

- 2 REFERENCES IN FILE CA (1957 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L22 ANSWER 40 OF 41 REGISTRY COPYRIGHT 2003 ACS
DΝ
     119-90-4 REGISTRY
     [1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Benzidine, 3,3'-dimethoxy- (8CI)
     Fast Blue B Base (6CI)
CN
OTHER NAMES:
     3,3'-Dimethoxy-4,4'-diaminodiphenyl
CN
     3,3'-Dimethoxybenzidene
CN
     3,3'-Dimethoxybenzidine
CN
     4,4'-Bi-o-anisidine
CN
CN
     4,4'-Diamino-3,3'-dimethoxy-1,1'-biphenyl
     Amacel Developed Navy SD
CN
     Azogene Fast Blue B
CN
     Blue Base Irqa B
CN
     Blue Base NB
CN
CN
     Blue BN Base
     C.I. Disperse Black 6
CN
CN
     Cellitazol B
CN
     Cibacete Diazo Navy Blue 2B
CN
     Diacel Navy DC
     Dianisidine
CN
     Fast Blue Base B
CN
CN
     Fast Blue DSC Base
CN
     Hiltonil Fast Blue B Base
CN .
     Kayaku Blue B Base
CN
     Lake Blue B Base
CN
     Mitsui Blue B Base
CN
     Naphthanil Blue B Base
CN
     o-Dianisidine
CN
     Setacyl Diazo Navy R
FS
     3D CONCORD
DR
     59777-10-5
MF
     C14 H16 N2 O2
CI
LC
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DRUGU,
       EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*,
       MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT,
       USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                     DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

$$_{\mathrm{H_2N}}$$
 OMe OMe

1519 REFERENCES IN FILE CA (1957 TO DATE)
35 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1519 REFERENCES IN FILE CAPLUS (1957 TO DATE)
18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L22 ANSWER 17 OF 41 REGISTRY COPYRIGHT 2003 ACS

RN 83310-76-3 REGISTRY

CN Acetamide, N,N'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 4',4'''-Bi-o-acetanisidide (6CI)

OTHER NAMES:

CN N, N'-Diacetyl-o-dianisidine

FS 3D CONCORD

MF C18 H20 N2 O4

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, RTECS*, TOXCENTER (*File contains numerically searchable property data)

- 14 REFERENCES IN FILE CA (1957 TO DATE)
- 14 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ANSWER 16 OF 41 REGISTRY COPYRIGHT 2003 ACS L22

83690-97-5 REGISTRY RN

Acetamide, N-(4'-amino-3,3'-dimethoxy[1,1'-biphenyl]-4-yl)- (9CI) (CA CNINDEX NAME)

OTHER NAMES:

N-Acetyl-o-dianisidine CN

FS 3D CONCORD MF C16 H18 N2 O3

BEILSTEIN*, CA, CAPLUS, RTECS*, TOXCENTER STN Files: LC(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1957 TO DATE)

10 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L25 ANSWER 28 OF 28 REGISTRY COPYRIGHT 2003 ACS

RN 612-42-0 REGISTRY

CN Benzoic acid, 2-[(carboxymethyl)amino]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Anthranilic acid, N-(carboxymethyl)- (6CI, 7CI, 8CI)

OTHER NAMES:

CN N-(2-Carboxyphenyl)glycine

CN N-(Carboxymethyl)anthranilic acid

FS 3D CONCORD

MF C9 H9 N O4

CI COM

LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, GMELIN*, HODOC*, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

- 44 REFERENCES IN FILE CA (1957 TO DATE)
- 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 44 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L25 ANSWER 27 OF 28 REGISTRY COPYRIGHT 2003 ACS
RN
     1147-65-5 REGISTRY
                                                        (CA INDEX NAME)
     Benzoic acid, 2-[bis(carboxymethyl)amino]- (9CI)
CN
OTHER CA INDEX NAMES:
     Acetic acid, [(o-carboxyphenyl)imino]di- (6CI, 7CI)
     Anthranilic acid, N,N-bis(carboxymethyl) - (8CI)
CN
OTHER NAMES:
     ANDA
CN
     Anthranil-N, N-diacetic acid
CN
     Anthranildiacetic acid
CN
     Anthranilic-N, N-diacetic acid
CN
     N, N-Bis (carboxymethyl) anthranilic acid
CN
CN
     N-(o-Carboxyphenyl)iminodiacetic acid
CN
     N-Carboxymethyl-N-(2-carboxyphenyl)glycine
MF
     C11 H11 N O6
CI
     COM
LC
     STN Files:
                  BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CSCHEM, GMELIN*,
       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
```

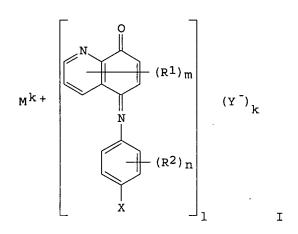
- 98 REFERENCES IN FILE CA (1957 TO DATE)
- 17 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 98 REFERENCES IN FILE CAPLUS (1957 TO DATE)
- 20 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L25 ANSWER 24 OF 28 REGISTRY COPYRIGHT 2003 ACS
RN
     32253-75-1 REGISTRY
     Benzoic acid, 5-bromo-2-[(carboxymethyl)amino]- (9CI)
                                                            (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Anthranilic acid, 5-bromo-N-(carboxymethyl) - (8CI)
OTHER NAMES:
     5-Bromo-2-carboxyphenylglycine
     5-Bromo-N-(carboxymethyl)anthranilic acid
FS
     3D CONCORD
MF
     C9 H8 Br N O4
                  BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
LC
     STN Files:
       MSDS-OHS
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

- 6 REFERENCES IN FILE CA (1957 TO DATE)
- 6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

```
ANSWER 71 OF 78 CA COPYRIGHT 2003 ACS
L48
AN
    110:145036 CA
    Printing plate materials having photopolymerization initiator
TΙ
    composition containing polymethine-type dyes and
    photopolymerizable composition
    Fukui, Tetsuro; Arahara, Kozo; Fukumoto, Hiroshi; Oguchi, Yoshihiro
IN
    Canon K. K., Japan
PA
     Jpn. Kokai Tokkyo Koho, 7 pp.
SO
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
    ICM G03C001-68
IC
     ICS C08F002-50
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     _____
                                          --------
                                                           ______
PΙ
    JP 63208036
                      A2
                           19880829
                                          JP 1987-40413
                                                           19870225
PRAI JP 1987-40413
                           19870225
    MARPAT 110:145036
OS
AB
     Printing plate materials contain a photopolymn. initiator compn.
     contg. polymethine-type dyes of the formula RR1C+(CH:CR2)m(CH:CH)nCH:CR3R4
     .X- [I; R, R1-4 = H, (substituted) alkyl, cycloalkyl, alkenyl,
     (substituted) aralkyl, (substituted) aryl, (substituted) styryl,
     (substituted) heterocyclyl; X- = anion; m = 0, 1; n = 0, 1, 2] and a
    photopolymg. photosensitive component as the main
     constituents. The materials are capable of making printing plates by
     using a compact and simple plate making app. using IR or
     semiconductor laser beams. Thus, a polyimide film was coated with a
     compn. contg. trimethylolpropane triacrylate, poly(Me methacrylate), I (R,
     R1-R4 = Et2NC6H4-p; X- = Cl04-; m = 0; n = 1), and benzoyl peroxide and
     then coated with poly(vinyl alc.) to give a photosensitive plate
     showing high sensitivity toward a semiconductor laser beam (830 nm).
ST
     printing plate material photopolymn initiator; polymethine dye
     printing plate material
IT
     Lithographic plates
        (photopolymn. initiators contg. polymethine dyes for)
                73214-79-6
IT
     15625-89-5
     RL: USES (Uses)
        (photopolymerizable photosensitive compn., lithog.
       plates contg.)
IT
     34330-11-5
                 91307-97-0
                              91308-01-9
                                           91320-04-6
                                                        119141-83-2
     119760-01-9
                  119760-03-1
                                119781-64-5
                                              119781-66-7
     RL: USES (Uses)
        (photosensitizer, photosensitive lithog. plates
       conta.)
IT
     94-36-0, Benzoyl peroxide, uses and miscellaneous
                                                       3006-86-8,
     1,1-Bis(tert-butylperoxy)cyclohexane 11118-65-3, Methylcyclohexanone
     peroxide
              12262-58-7, Cyclohexanone peroxide 33943-20-3,
     Di-tert-butyldiperoxy isophthalate
     RL: USES (Uses)
        (polymn. initiator, photosensitive lithog. plates contg.)
```

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L48
    ANSWER 67 OF 78 CA COPYRIGHT 2003 ACS
AN
     121:69570 CA
     Photopolymerizable composition for printing platemaking
TI
     Komamura, Tawara; Watanabe, Hiroshi; Maehashi, Tatsuichi; Nakatani,
IN
     Koichi; Kato, Katsunori
PA
     Konishiroku Photo Ind, Japan
     Jpn. Kokai Tokkyo Koho, 10 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
LA
     ICM G03F007-029
IC
     ICS G03F007-00; G03F007-027; G03F007-028
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
FAN.CNT 1
                      KIND
                                           APPLICATION NO.
     PATENT NO.
                            DATE
                                                            DATE
     ______
                      _ _ _ _
                            -----
     JP 05216227
                            19930827
                                           JP 1992-21321
PΤ
                       Α2
                                                            19920206
PRAI JP 1992-21321
                            19920206
GI
```



AB The photopolymerizable compn. contains as photopolymn. initiator, (I) [R1, R2 = H, halo, monovalent substituent; X = OH, NR3R4 (R3, R4 = H, alkyl); R2 and R3 or R4 may form a ring; Y- = anion; M =transition element; k = 1-3; l = 2,3; m = 1-5; n = 1-4]. The photopolymerizable compn. is esp. useful in presensitized lithog. printing plates sensitive to visible and IR radiation. ST lithog platemaking photopolymerizable compn; metal complex initiator photopolymerizable compn ΙT Polymerization catalysts (photo-, metal complex) IT Lithographic plates (presensitized, photosensitive compn. for, IR -sensitive) IT 120307-06-4 153146-33-9 156060-41-2 RL: USES (Uses) (metal complex salt contg., photopolymn. initiators from) 7440-18-8D, Ruthenium, complexes with oxoquinoline derivs. 7440-48-4D, Cobalt, complexes with oxoquinoline derivs. 153121-11-0D, cobalt complexes 156074-15-6D, complexes with cobalt and ruthenium 156074-16-7D, ruthenium complexes 156074-17-8D, ruthenium complexes 156074-18-9D, ruthenium complexes 156188-89-5 156188-91-9 RL: USES (Uses) (photopolymn. initiator)

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L48 ANSWER 66 OF 78 CA COPYRIGHT 2003 ACS
```

AN 121:289655 CA

TI Photopolymerizable composition containing squaraines

IN Yamaoka, Tsuguo; Koseki, Kenichi; Obara, Mitsuharu; Shimizu, Ikuo; Ito, Yukiyoski; Kawato, Hitoshi

PA Kyowa Hakko Kogyo Co., Ltd., Japan

SO PCT Int. Appl., 37 pp. CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM G03F007-031

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 3

GΙ

TAN. CNI 5										
	PATENT NO. KIND		KIND	DATE	APPLICATION NO. DATE					
			- -							
PI	WO	9401806	Al	19940120	WO 1993-JP932 19930707					
		W: CA, JP,	US							
		RW: AT, BE,	CH, DE	, DK, ES,	FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
	EΡ	611997	A1	19940824	EP 1993-914964 19930707					
	EP 611997		B1	20030212						
		R: CH, DE,	FR, GB	, LI						
	ΕP	1113335	A1	20010704	EP 2001-106388 19930707					
		R: CH, DE,	FR, GB	, LI						
	JP	3202989	B2	20010827	JP 1994-503173 19930707					
PRAI	JΡ	1992-185224	Α	19920713						
	EP	1993-914964	A3	19930707						
	WO	1993-JP932	W	19930707	`					

$$R^{3}-N$$
 $R^{3}-N$
 R^{5}
 R^{5}

AB The title photopolymerizable compn. contains an addn.-polymerizable compd. having .gtoreq.1 ethylenically unsatd. double bond (s), a free-radical generator, and a squarylium compd. I [R1, R2 = II (R3, 4 = H, alkyl, aryl, aralkyl; R5 = halo, alkyl, alkoxy, nitro, OH; n = 0-4; when n = 2-4, R5 may be the same or different; R6 = R5, CN, trifluoromethyl, NR7R8; R7, R8 = R3; p = 0-5, when p = 2-5, R6 may be the same or different), III (R9 = alkyl), etc.]. The compn. is highly sensitive to visible and near-IR rays, esp., a He-Ne laser, a light-emitting diode, a semiconductor laser, etc., each emitting light having a wavelength range >600 nm; the compn. is useful as the material of holograms, presensitized lithog. plates for laser direct platemaking, dry film resists, digital proof, photosensitive microcapsules, etc.

ST near IR photopolymg compn squaraine

IT Resists

(photo-, dry-film; photopolymerizable compn. highly sensitive to visible and near-IR rays for)

- IT Photoimaging compositions and processes
 (photopolymerizable, photopolymerizable compn.
 highly sensitive to visible and near-IR rays)
- IT 3524-68-3, Pentaerythritol triacrylate 6542-67-2, 2, 4,
 6-Tris(trichloromethyl)-s-triazine
 RL: TEM (Technical or engineered material use); USES (Uses)
 - RL: TEM (Technical or engineered material use); USES (Uses) (photopolymerizable compn. highly sensitive to visible and near-IR rays)
- IT 156057-15-7 156057-17-9 159094-53-8 159094-54-9 159094-55-0 159094-56-1
 - RL: TEM (Technical or engineered material use); USES (Uses) (prepn. of squaraines for **photopolymerizable** compn. highly sensitive to visible and near-IR rays)

```
AN
    125:127860 CA
    Photosensitive material for lithographic plates and
ΤI
    method for making the plates
IN
    Maehashi, Tatsuichi; Matsumoto, Shinji; Kuroki, Takaaki; Kawakami, Sota
    Konishiroku Photo Ind, Japan
PA
    Jpn. Kokai Tokkyo Koho, 20 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
IC
    ICM G03F007-028
    ICS G03F007-00; G03F007-027; G03F007-029; G03F007-20
CC
    74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                  KIND DATE
                                         APPLICATION NO. DATE
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                                          _____
    JP 08114916
                      A2
                           19960507
                                          JP 1994-247968
                                                           19941013
PΙ
                           19941013
PRAI JP 1994-247968
    The photosensitive material comprises a hydrophilic support
    having thereon a photosensitive layer contg. a compd. having
     .gtoreq.1 ethylenic unsatd. bond, a binder, and a photopolymn.
    initiator and a protective layer and the photopolymn. initiator
    at least contains a salt of a cationic dye with an organoboron compd.
    anion and the other B salts at mol. ratio 1:2-5. Also claimed is a method
    for making lithog. plates by imagewise exposure of a
    photosensitive layer to laser followed by removal of the unexposed
    area of the protective layer and the photosensitive layer by
    dissoln. The cationic dye may be a near-IR-absorbing
    R1R2C+(CH:CR5)m(CH:CH)nCH:CR3R4 X- [R1-5 = H, (un)substituted H, alkyl,
    cycloalkyl, aryl, aralkyl, styryl, heterocyclyl; m = 0, 1; n = 0-2; X- = B
    compd. anion]. The photosensitive material shows good storage
    stability.
ST
    presensitized lithog plate laser sensitive; photosensitive compn
    presensitized lithog plate; cationic dye presensitized lithog plate;
    polymethine dye presensitized lithog plate
IT
    Dyes
    Dyes, cyanine
        (near-IR-absorbing, near-IR-sensitive
       photosensitive compn. for lithog. plates contg. cationic dye
       organoboron salts and B salts as photopolymn. initiators)
TT
    Polymerization catalysts
        (photochem., near-IR-sensitive
       photosensitive compn. for lithog. plates contg. cationic dye
       organoboron salts and B salts as photopolymn. initiators)
IT
    Lithographic plates
        (presensitized, near-IR-sensitive photosensitive
       compn. for lithog. plates contg. cationic dye organoboron salts and B
       salts as photopolymn. initiators)
    65859-86-1, Lithium butyltriphenylborate 120307-06-4, Tetrabutylammonium
IT
    butyltriphenylborate 141714-54-7 141714-63-8 153146-33-9,
    Tetrabutylphosphonium butyltriphenylborate 157075-01-9 179128-74-6
    179268-23-6
    RL: CAT (Catalyst use); USES (Uses)
        (near-IR-sensitive photosensitive compn. for
       lithog. plates contg. cationic dye organoboron salts and B salts as
       photopolymn. initiators)
IT
    26351-99-5 29570-58-9, Dipentaerythritol hexaacrylate
    RL: TEM (Technical or engineered material use); USES (Uses)
        (near-IR-sensitive photosensitive compn. for
       lithog. plates contg. cationic dye organoboron salts and B salts as
       photopolymn. initiators)
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ANSWER 61 OF 78 CA COPYRIGHT 2003 ACS

L48

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L48
     ANSWER 60 OF 78 CA COPYRIGHT 2003 ACS
AN
     125:261311 CA
     Water-developable photosensitive composition and
TТ
     lithographic printing plate
     Hatsutori, Ryoji; Kojima, Yasuo; Sasa, Nobumasa
IN
     Konishiroku Photo Ind, Japan
PA
     Jpn. Kokai Tokkyo Koho, 24 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
LΑ
     ICM G03F007-004
IC
     ICS G03F007-00; G03F007-029; G03F007-033; G03F007-32
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
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                                                           -----
     JP 08190192
                      A2
                            19960723
                                          JP 1995-2630
                                                           19950111
PRAI JP 1995-2630
                           19950111
     The compn. contains a polymerizable compd., a photopolymn.
     initiator, an org. solvent-dispersible latex, and a phenol OH-, NH2-,
     and/or CO-contq. compd. Alternatively the compn. contains a polymerizable
     compd., a near IR-absorbing cationic dye borate coplex, and an
     org. solvent-dispersible latex. The lithog. plate using the compn. is
     also claimed. The compn. has improved storage stability.
     photosensitive lithog plate water developable
ST
     Lithographic plates
IT
        (water-developable photosensitive compns. with storage
        stability for lithog. printing plates)
IT
     85-60-9, 4,4'-Butylidenebis(3-methyl-6-tert-butylphenol)
     1843-05-6, 2-Hydroxy-4-octoxybenzophenone
     RL: MOA (Modifier or additive use); USES (Uses)
        (antioxidants; water-developable photosensitive compns. with
        storage stability for lithog. printing plates)
IT
     63226-13-1
                  141714-54-7
                               157186-53-3
     RL: CAT (Catalyst use); USES (Uses)
        (photopolymn. initiator; water-developable
        photosensitive compns. with storage stability for lithog.
        printing plates)
IT
     3524-68-3, Pentaerythritol triacrylate 181815-80-5
     RL: TEM (Technical or engineered material use); USES (Uses)
        (water-developable photosensitive compns. with storage
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stability for lithog. printing plates)

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L48
    ANSWER 59 OF 78 CA COPYRIGHT 2003 ACS
AN
    125:342868 CA
    Photopolymerization image-forming method using laser beam
ТT
    Urano, Toshoshi; Yamaoka, Tsugio; Nagasaka, Hideki
IN
PA
    Mitsubishi Chem Corp, Japan
    Jpn. Kokai Tokkyo Koho, 10 pp.
SO
    CODEN: JKXXAF
    Patent
DT
    Japanese
LA
    ICM G03F007-029
TC
     ICS G03F007-028
CC
     74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 37, 76
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
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                                          -----
                      A2
PΙ
    JP 08220759
                           19960830
                                          JP 1995-28413
                                                          19950216
PRAI JP 1995-28413
                           19950216
    The photopolymerizable compn., comprising (1) .gtoreq.1
     radical-generator selected from org. peroxides, onium salts,
     hexaarylbiimidazoles, titanocene compds., heterocycles contg. .gtoreq.1 of
     S, O, and N contg. polyhalomethyl group, and polyhalomethylsulfone
     compds., (2) a compd. having .gtoreq.2 ethylenic unsatd. bonds, and (3) a
     sensitizing dye, are simultaneously irradiated with a light for excitation
     from the ground state and a light for excitation from the triplet state of
     the sensitizer to form images. Clear images can be obtained by low power
     laser or IR laser irradn. The material is useful for manuf. of
     lithog. plates and elec. circuits.
ST
     image formating material sensitizing dye; radical generator presensitized
     lithog plate
     Lithographic plates
IT
        (presensitized, photopolymerizable compd. contq. radial
       generator , unsatd. compd. and sensitizing dye)
IT
     Resists
        (radiation-sensitive, photopolymerizable compd. contg. radial
       generator , unsatd. compd. and sensitizing dye)
ΙT
     1707-68-2
               6542-67-2
                          58109-40-3
                                         77473-08-6
                                                     125051-32-3
     RL: CAT (Catalyst use); USES (Uses)
        (photopolymerizable compd. contg. radial generator, unsatd.
        compd., and sensitizing dye)
IT
     15625-89-5, Trimethylolpropane triacrylate
                                                 26936-24-3, Methyl
     acrylate-methacrylic acid-methyl methacrylate copolymer
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
     use); USES (Uses)
        (photopolymerizable compd. contg. radial generator , unsatd.
        compd., and sensitizing dye)
IT
     63226-13-1 83179-50-4
                             162461-65-6
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (sensitizing dye; photopolymerizable compd. contq. radial
       generator , unsatd. compd., and sensitizing dye)
```

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L48 ANSWER 58 OF 78 CA COPYRIGHT 2003 ACS
AN
    126:244890 CA
    Photopolymerizing composition, image-forming material, radical
TI
    generation, photosensitive material for preparing
    lithographic plate, and preparation of lithographic
    plate
    Nakayama, Noritaka
TN
PΑ
    Konishiroku Photo Ind, Japan
SO
    Jpn. Kokai Tokkyo Koho, 21 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
    ICM G03F007-029
TC
    ICS B41C001-00; G03F007-00; G03F007-004; G03F007-027; G03F007-031;
         G03F007-20
    74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
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                                                          ______
    JP 09034110
PΙ
                      A2 19970207
                                          JP 1995-180086 19950717
PRAI JP 1995-180086
                           19950717
os
    MARPAT 126:244890
AΒ
    The title compn. contains a polymg. compd., .gtoreq.1 onium salt selected
    from R1P+R2R3R4 X-, R5S+R6R7 X-, R8I+R9 X-, and R10N+R11R12R13 X- (R1-4,
    R10-13 = alkyl, aryl, aralkyl, R1-4 or R10-13 may form a ring; R5-7 =
    alkyl, aryl, R5-7 may form a ring; R8, R9 = aryl; X- = counter anion), a
    light-heat-converting element, and a radical-generating agent. The
     image-forming material comprises the compn. contq. the onium salt in which
     the counter anion is Cl- or Br-. Radicals are generated by irradn. of the
     compn. using IR rays. The photosensitive material
     comprises a hydrophilic support with coatings of a photosensitive
     layer contg. a compd. having .gtoreq.1 ethylenic unsatd. bond, a binder,
     .gtoreq.1 of the above onium salts, a light-heat-converting element, and a
    radical-generating agent and a protective layer. The material is
     imagewise exposed under semiconductor laser scanning followed by removing
    the protective layer and the unexposed areas of the photosensitive
     layer to give a lithog. printing plate. The compn. provides high
     sensitive and high resoln. images using IR rays and shows good
     storage stability.
    photopolymerizable compn onium salt; sulfonium salt
    photopolymerizable compn; ammonium salt photopolymerizable
    compn; light heat conversion agent; radical initiator
    photopolymerizable compn; photosensitive lithog plate
    onium salt; semiconductor laser scanning lithog plate; IR ray
    radical generator
    Phosphonium compounds
    Quaternary ammonium compounds, uses
    RL: MOA (Modifier or additive use); USES (Uses)
        (photosensitive lithog. plate prepd. from compn. contg. onium
       compd. by semiconductor laser scanning)
IT
    Lithographic plates
        (photosensitive; photosensitive lithog. plate
       prepd. from compn. contg. onium compd. by semiconductor laser scanning)
TT
    12157-31-2
                 108961-97-3
                               109347-70-8
                                            110930-60-4
                                                         173474-43-6
    RL: MOA (Modifier or additive use); USES (Uses)
        (light-heat conversion agent; photosensitive lithog. plate
       prepd. from compn. contg. onium compd. by semiconductor laser scanning)
    56-37-1, Benzyltriethylammonium chloride 869-51-2 1643-19-2,
    Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide
                4189-82-6, Diphenyl (p-methylphenyl) sulfonium bromide
    3462-97-3
                14866-34-3, Tetradodecylammonium bromide 25316-59-0,
    5667-47-0
    Benzyltributylammonium bromide 58377-39-2, Bis(P-tert-
    butylphenyl)iodonium bromide
```

RL: MOA (Modifier or additive use); USES (Uses)
(photosensitive lithog. plate prepd. from compn. contg. onium compd. by semiconductor laser scanning)

1707-68-2 29777-36-4 71002-23-8 188348-58-5

RL: CAT (Catalyst use); USES (Uses)

IT

(radical initiator; photosensitive lithog. plate prepd. from compn. contg. onium compd. by semiconductor laser scanning)

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T.48
    ANSWER 57 OF 78 CA COPYRIGHT 2003 ACS
     126:270395 CA
AN
ΤI
     Process for producing lithographic printing plate,
     photosensitive plate and aqueous ink composition therefor
     Hase, Takakazu; Arimatsu, Seiji; Kimoto, Koichi
TN
PΑ
     Nippon Paint Co., Ltd., Japan
     U.S., 8 pp., Cont.-in-part of U.S.Ser.No.870,423, abandoned.
SO
     CODEN: USXXAM
DT
     Patent
LA
     English
     ICM G03F007-30
IC
NCL
     430302000
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
FAN.CNT 2
                                           APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                           _____
                                           ______
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                     _ _ _ _
                                                           _____
                                                            19941005
     US 5609993
                      Α
                            19970311
                                           US 1994-318559
_{\rm PI}
                                                            19910417
                      A2
                            19921109
                                           JP 1991-85176
     JP 04317065
PRAI JP 1991-85176
                            19910417
     US 1992-870423
                            19920417
     The present invention provides an improvement of a direct lithog. printing
AB
     plate-making process using ink-jet printing to provide a lithog. printing
     plate having excellent resoln. Accordingly, the present invention
     provides an improvement of a process for producing a lithog. printing
     plate comprising selectively forming a light-transmittable oxygen barrier
     film on a photopolymerizable layer of a photosensitive
     plate, exposing to light and then removing uncured portion on which the
     oxygen barrier film is not covered, wherein a protective layer which is
     capable of transmitting oxygen gas and the light to cure the
     photopolymerizable layer is formed on the
     photopolymerizable layer, a photosensitive plate
     therefor, and an aq. ink compn. therefor.
st
     lithog plate prepn ink jet printing
IT
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (PEO 1; direct lithog. plate prepn. by photopolymn. and
        ink-jet printing using photosensitive plates with protective
        layers of)
IT
     Ink-jet printing
        (in prepn. of lithog. plates)
TT
     Polyurethanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (oligomers, Viscoat; in prepn. of lithog. plates)
IΤ
     Lithographic plates
        (prepn. using photopolymn. and ink-jet printing)
TT
     9003-39-8, Poly(vinylpyrrolidone)
     RL: TEM (Technical or engineered material use); USES (Uses)
        (K 30; direct lithog. plate prepn. by photopolymn. and
        ink-jet printing using photosensitive plates with protective
        layers of)
ΙT
     25322-68-3
     RL: TEM (Technical or engineered material use); USES (Uses)
        (PEO 1; direct lithog. plate prepn. by photopolymn. and
        ink-jet printing using photosensitive plates with protective
        layers of)
IT
     128-37-0, 2,6-Di-tert-butyl-4-methylphenol, uses
                                                      3524-68-3
                                                                    25930-98-7,
     Neocryl B 723
                     58206-31-8, Scripset 540 71868-10-5, IR 907
     RL: TEM (Technical or engineered material use); USES (Uses)
        (direct lithog, plate prepn. by ink-jet printing and
        photopolymn. using photopolymn. compn. contg.)
     56-81-5, 1,2,3-Propanetriol, uses 569-64-2, Malachite green
ΙT
                                                                     9002-89-5,
                         9016-45-9, Polyethylene glycol nonylphenyl ether
     Poly(vinyl alcohol)
     RL: TEM (Technical or engineered material use); USES (Uses)
```

(direct lithog. plate prepn. by photopolymn. and ink-jet
 printing using ink compn. contg.)

9004-62-0, Hydroxyethylcellulose 9004-64-2, Hydroxypropylcellulose
9004-65-3, Hydroxypropylmethylcellulose
RL: TEM (Technical or engineered material use); USES (Uses)
 (direct lithog. plate prepn. by photopolymn. and ink-jet
 printing using photosensitive plates with protective layers
 of)

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L48 ANSWER 56 OF 78 CA COPYRIGHT 2003 ACS
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AN 127:101775 CA

TI Photoradical generating agent, photopolymerizable composition, and process of presensitized lithographic printing plate

IN Nakayama, Noritaka

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 24 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-029

ICS C07F009-54; C08F002-50; G03F007-031; C07C381-12

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

FAN.CNT 1

AB In the photoradical generating agent contg. an onium salt represented by I, II, III, and IV (R1-4, R10-12 = alkyl, aryl, aralkyl; R5-7 = alkyl, aryl; R8,9 = aryl; X- = counter ion), a radical generating agent, and carbon black, the onium salt and/or the radical generating agent is adsorbed on carbon black. The counter ion may be a halogen ion. The radical generating agent may be a bisimidazole deriv. The compn. is used for a photosensitive layer of a presensitized lithog. printing plate, in which the photosensitive layer contains a compd. having .gtoreq.1 ethylenic unsatd. bond, a binder, and the photoradical generating agent. The presensitized lithog. printing plate is exposed by a laser beam, and then unexposed areas of the protective layer and the photosensitive layer are eluted. A high concn. of the photoradical was generated by irradiating IR light.

ST photoradical generator presensitized lithog printing plate

IT Lithographic plates

(photopolymerizable compn. in presensitized lithog. printing plate)

IT Carbon black, uses

RL: NUU (Other use, unclassified); USES (Uses)

(photopolymerizable compn. in presensitized lithog. printing plate)

IT 869-51-2, Tris(2-hydroxyethyl)sulfonium chloride 1643-19-2, Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide 3462-97-3, 4-Methoxybenzyltriphenylphosphonium chloride 4189-82-6 5197-95-5, Benzyltriethylammonium bromide 5667-47-0 14937-42-9, Tetra(decyl)ammonium bromide 25316-59-0, Benzyltributylammonium bromide 58377-39-2

RL: MOA (Modifier or additive use); USES (Uses) (photopolymerizable compn. in presensitized lithog. printing

plate) 108961-97-3 109347-70-8 110930-60-4 2256-48-6 12157-31-2 IT 173474-43-6 RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(photopolymerizable compn. in presensitized lithog. printing plate) ΙT 90-94-8 1707-68-2 82799-44-8 189515-41-1 RL: MOA (Modifier or additive use); USES (Uses) (photoradical generating agent in compn. in presensitized lithog. printing plate)

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ANSWER 55 OF 78 CA COPYRIGHT 2003 ACS
T.48
ΔN
     128:134403 CA
     Photosensitive composition and element containing polyazide and
ΤI
     infrared absorber in photocrosslinkable binder
     West, Paul Richard; Gurney, Jeffery Allen
IN
PA
     Eastman Kodak Co., USA
SO
     U.S., 7 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
     ICM G03F007-012
IC
NCL 430167000
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                                                            -----
     US 5705309
                           19980106
                                          US 1996-719100
PΙ
                      Α
                                                            19960924
     DE 19738134
                      A1
                           19980326
                                          DE 1997-19738134 19970901
     JP 10115914
                     A2
                           19980506
                                           JP 1997-258736 19970924
PRAI US 1996-719100
                           19960924
     An IR imaging compn. comprises a photocrosslinkable
     polymeric binder having pendant photopolymerizable olefinic
     double bonds, a polyazide photoinitiator, and an IR
     -absorbing compd. The imaging compn. is useful in prepn. of a
     presensitized lithog. printing plate that can be used to provide an image
     using a laser, followed by development.
ST
     IR laser photoimaging compn lithog plate; polyazide
     IR photoimaging compn lithog plate;
     photopolymerizable binder IR laser photoimaging
     compn
IT
     Lithographic plates
        (IR imaging compns. contg. polyazides, IR
        absorbers, and photocrosslinkable binders for manuf. of)
IT
     Polyamic acids
     RL: TEM (Technical or engineered material use); USES (Uses)
        (IR imaging compns. for lithog. plate manuf. contg.
       polyazides and)
TT
     Carbon black, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (IR imaging compns. for lithog. plate manuf. contg.
       polyazides, photocrosslinkable binders and)
TΤ
     Photoimaging materials
        (IR; contg. polyazides, IR absorbers, and
       photocrosslinkable binders for lithog. plate prepn.)
IT
     Polyethers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me siloxane-, BYK 307; IR imaging compns. for lithog.
       plate manuf. contg. polyazides and)
IT
     Polysiloxanes, uses
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me, polyether-, BYK 307; IR imaging compns. for lithog.
       plate manuf. contg. polyazides and)
TT
     5284-79-7, 2,6-Bis(p-azidobenzal)-4-methylcyclohexanone
     RL: TEM (Technical or engineered material use); USES (Uses)
        (IR imaging compns. for lithog. plate manuf. contq.
       photopolymerizable binders and)
IT
     31942-21-9D, Benzophenonetetracarboxylic dianhydride-oxydianiline-m-
    phenylenediamine copolymer, esterified with hydroxyethyl methacrylate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (IR imaging compns. for lithog. plate manuf. contq.
       polyazides and)
IT
     2718-90-3
                2915-44-8
                                        10193-62-1, 4,4'-Diazidostilbene
                            5284-80-0
```

14128-15-5 17303-16-1, 4,4'-Diazidobenzophenone 20237-98-3

48180-65-0 72695-23-9

RL: TEM (Technical or engineered material use); USES (Uses) (IR imaging compns. for lithog. plate manuf. contg. polymerizable binders, IR absorbers and)

IT 147-14-8, Irgalite Blue GLVO

RL: TEM (Technical or engineered material use); USES (Uses) (Irgalite Blue GLVO; IR imaging compns. for lithog. plate manuf. contg. polyazides and)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Anon; EP 562952 1993
- (2) Anon; EP 654711 1995 CA
- (3) Bills; US 5278023 1994 CA
- (4) Etherington; US 5254431 1993 CA
- (5) Kotachi; US 5326670 1994 CA
- (6) Kozu; US 3840390 1974 CA
- (7) Pawlowski; US 4940646 1990 CA
- (8) Potts; US 5238777 1993 CA
- (9) Rauner; US 4139390 1979 CA
- (10) West; US 4622284 1986 CA

L48 ANSWER 54 OF 78 CA COPYRIGHT 2003 ACS

AN 129:34443 CA

TI Photopolymerizable composition containing addition-polymerizable compound, radical-producing agent, and squarylium compound

IN Yamaoka, Tsuguo; Koseki, Kenichi; Obara, Mitsuharu; Shimizu, Ikuo; Ito, Yukiyoshi; Kawato, Hitoshi

PA Kyowa Hakko Co., Ltd., Japan

SO U.S., 11 pp., Cont. of U.S. Ser. No. 204,363, abandoned. CODEN: USXXAM

DT Patent

LA English

IC ICM G03C001-73

NCL 430281100

CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN CNT 3

FAN. CNT 3									
	PATENT NO	KIND	DATE	APPLICATION NO.	DATE				
ΡI	US 5756258	A	19980526	US 1995-386468	19950210				
	EP 1113335	A1	20010704	EP 2001-106388	19930707				
R: CH, DE, FR, GB, LI									
	US 5527659	A	19960618	US 1994-331147	19941028				
	US 6007965	A	19991228	US 1997-946353	19971007				
PRAI	JP 1992-185224	Α	19920713						
	US 1993-52999	B1	19930427						
	US 1994-204363	B1	19940311						
	US 1994-331147	A2	19941028						
	JP 1992-113604	Α	19920506						
	EP 1993-914964	A3	19930707						
	US 1995-386468	A1	19950210						
os	MARPAT 129:34443								
GI									

$$R^{1}$$
 Q^{-}
 R^{12}
 R^{13}
 R^{15}
 R^{15}
 R^{15}
 R^{15}
 R^{15}
 R^{15}

$$-CH = \bigvee_{\substack{N \\ N \\ R11}}^{R10} \bigvee_{N}$$

The present invention relates to a **photopolymerizable** compn. comprising an addn.-polymerizable compd. which has at least one ethylenically unsatd. double bond, a radical-producing agent, and a squarylium compd. represented by the formula I (R1 = II where R12, R13 = alkyl or R12 and R13 together with the carbon atom to which they are bonded may form a hydrocarbon ring which may be substituted with .gtoreq.1

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halogen atom, an alkyl group, or an alkoxy group; R14 = H, alkyl, aryl, or
     aralkyl; R15 = halogen, alkyl, aryl, alkoxy, or aralkyl; m = an integer of
     0-4 provided that when m = 2-4, two adjacent R15 groups together may form
     an arom. ring which may be substituted with .gtoreq.1 halogen atom, an
     alkyl group, or an alkoxy group; R2 = III where R10, R11 = H, alkyl, aryl,
     or aralkyl). The compn. is highly sensitive to visible and near
     IR lights, particularly He-Ne laser, LED, diode laser, etc. having
     oscillation wavelengths in .gtoreq.600 nm, and thus is useful as a
     material for holograms, presensitized plates for laser direct process, dry
     film resists, digital proofs, and photosensitive microcapsules.
     photopolymerizable compn squarylium compd lithog plate;
     photoresist photopolymerizable compn squarylium compd;
     holog photopolymerizable compn squarylium compd
     Photoresists
        (photopolymerizable compns. contg. addn.-polymerizable
        compds., radical-producing agents, and squarylium compds. as)
     Holography
        (photopolymerizable compns. contg. addn.-polymerizable
        compds., radical-producing agents, and squarylium compds. for)
     Lithographic plates
        (photopolymerizable compns. contg. addn.-polymerizable
        compds., radical-producing agents, and squarylium compds. for prepn.
        of)
     Photoimaging materials
        (photopolymerizable; contg. addn.-polymerizable compds.,
        radical-producing agents, and squarylium compds.)
     135596-19-9
                   156057-17-9
                                 159094-57-2
     RL: TEM (Technical or engineered material use); USES (Uses)
        (photopolymerizable compns. for holog. and
       photolithog. contg.)
     79-41-4D, Methacrylic acid, esters, polymers
                                                    3524-68-3, Pentaerythritol
     triacrylate
                   6542-67-2, 2,4,6-Tris(trichloromethyl)triazine
     RL: TEM (Technical or engineered material use); USES (Uses)
        (photopolymerizable compns. for holog. and
       photolithog. contg. squarylium compds. and)
     156057-15-7P
                    156057-31-7P
                                  156099-24-0P
                                                  156764-74-8P
     RL: SPN (Synthetic preparation); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (prepn. and use in prepg. photopolymerizable compns. for
        holog. and photolithog.)
     91-22-5, Quinoline, reactions
                                     118-12-7, 1,3,3-Trimethyl-2-
     methyleneindoline
                         605-59-4, N-Ethyllepidinium iodide
     7478-69-5, 1,1-Bis (p-dimethylaminophenyl) ethylene
                                                         61699-62-5,
     3,4-Diisopropoxy-3-cyclobutene-1,2-dione
                                                155950-65-5,
     1,3-Dihexyl-2-methylimidazo[4,5-b]iquinoxalinium tosylate
     1,3-Dibutyl-2-methylimidazo[4,5-b]iquinoxalinium tosylate
     RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
     (Reactant or reagent); USES (Uses)
        (reaction in prepg. squarylium compds. for photopolymerizable
        compns. for holog. and photolithog.)
RE.CNT
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Anon; EP 0379200 1990 CA
(2) Anon; JP 2306247 1990
(3) Anon; EP 0408014 1991 CA
(4) Santoh; US 5190849 1993
(5) Satoh; US 5256794 1993 CA
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ST

ΙT

TΤ

IT

IT

IT

IT

IT

TT

RE

(6) Yamaoka; US 5527659 1996 CA

L48 ANSWER 49 OF 78 CA COPYRIGHT 2003 ACS

AN 131:94917 CA

TI Presensitized **lithographic** plate using surface-treated aluminum support and its manufacture

IN Mori, Takahiro

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 64 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-038

ICS B41N001-08; G03F007-00; G03F007-004; G03F007-016; G03F007-022; G03F007-023; G03F007-027; G03F007-09

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

GI

PATENT NO. KIND DATE APPLICATION NO. DATE ----------_ _ _ _ -----_____ A2 19990622 PΙ JP 11167204 JP 1997-332970 19971203 19971203 PRAI JP 1997-332970 os MARPAT 131:94917

AΒ The title presensitized lithog, plate comprises an Al support having small pits with av. opening diam 0.2-3.0 .mu.m which are formed densely in undulations with av. wavelength in height 3-30 .mu.m or large pits with av. opening diam. 3-30 .mu.m and roughly spherical protuberance having an av. diam. of 0.01 .mu.m to .ltoreq.1/2 of the small pit av. opening diam. inside of the small pits and thereover a layer made of a photosensitive compn. contq. an o-naphthoquinonediazidesulfonate of a polycondensation resin of poly(hydroxyphenols) with ketones or aldehydes (no. av. mol. wt. 3.00 .times. 102-2.00 .times. 103 and wt. av. mol. wt. 5.00 .times. 102-4.00 .times. 103) and an alkali-sol. resin. The photosensitive compn. may contain (1) a polymer having a structural unit CR1R2CR3(CONR4AmBOH) [R1, R2 = H, alkyl, CO2H; R3 = H, halo, alkyl; R4 = H, alkyl, Ph, aralkyl; A = divalent linking group; m = 0 or 1; B = (substituted) phenylene, (substituted) naphthylene] in its mol. structure and an o-quinonediazide compd., (2) a resin prepd. by copolycondensation of phenol and a 1-9:9- 1 molar ratio mixt. of p- and m-cresols with aldehydes and an o-quinonediazide compd., (3) an o-quinonediazide compd., a sym.-triazine compd. I [R1, R2 = (substituted) alkyl, (substituted) alkoxy, H; R3, R4 = C1-3 haloalkyl or haloalkenyl], a dye of which the color changes by interaction with the photolysis product of the triazine compd., and an alkali-sol. resin, (4) a compd. having .gtoreq.1 addn.-polymerizable ethylenic unsatd. double bond., an acidic vinyl copolymer sol. or swellable in aq. alkali solns. comprising a compd. having an arom. and/or aliph. OH group in its side chain as a structural unit in its mol., a photopolymn. initiator, and a diazo resin, (5) an acid-generator, an acid-decomposable compd., and an IR absorbent, and (6) an acid-generator, an acid-insolubilizing compd., and an IR absorbent. An Al support is either mech. coarsened or electrolytically coarsened after degreasing, surface dissoln.-treated with an alkali, neutralized with an acid,

electrolytically coarsened in an acidic electrolyte, addnl. surface dissoln.-treated with an alkali, neutralized with an acid, anodized to form an anodic oxide film, and coated thereon with a layer made of a metal oxide obtained by hydrolysis and polycondensation of an org. or inorg. metal compd. and then with a **photosensitive** layer made of the above compn. to give the title lithog. plate. An Al support may be surface dissoln.-treated with an alkali, neutralized with an acid, electrolytically coarsened in an acidic electrolyte based on HCl and/or AcOH, addnl. surface dissoln.-treated with an alkali, neutralized with an acid, anodized, and then coated with the above 2 layers to obtain the lithog. plate. The lithog. plate shows improved printing durability and small dot reproducibility upon printing under high speed and severe conditions such as offset rotary printing and good processability with ball-point pen and iso-PrOH-free dampening water.

ST presensitized lithog plate aluminum support surface; quinonediazide compd presensitized lithog plate; alkali soluble resin presensitized lithog plate; triazine presensitized lithog plate; vinyl copolymer presensitized lithog plate

IT Phenolic resins, uses

RL: DEV (Device component use); USES (Uses)

(presensitized lithog. plate using surface-treated aluminum support)

IT Lithographic plates

(presensitized; presensitized lithog. plate using surface-treated aluminum support)

IT Silicates, uses

IT

ΙT

RL: DEV (Device component use); USES (Uses)

(undercoat layer; presensitized lithog. plate using surface-treated aluminum support)

IT 3524-68-3 9003-35-4, Formaldehyde-phenol copolymer 9016-83-5, Cresol-formaldehyde copolymer 15625-89-5, Trimethylolpropane triacrylate 23295-00-3 35464-74-5, m-Cresol-p-cresol-formaldehyde-phenol copolymer 72063-23-1, Acrylonitrile-N-(4-hydroxyphenyl)methacrylamide-methacrylic acid-methyl methacrylate copolymer 74094-65-8, alpha.-Naphthyl 1,2-naphthoquinone-2-diazido-5-sulfonate 220937-57-5

RL: DEV (Device component use); USES (Uses)

(presensitized lithog. plate using surface-treated aluminum support)
IT 2390-60-5, Victoria Pure Blue BOH 229326-43-6 229326-44-7
229326-45-8

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(presensitized lithog. plate using surface-treated aluminum support) 7646-85-7DP, Zinc chloride, reaction products with diazo resin and ammonium hexafluorophosphate 16941-11-0DP, Ammonium hexafluorophosphate, reaction products with zinc chloride and diazo resin 125766-04-3DP, reaction products with zinc chloride and ammonium hexafluorophosphate 125785-09-3DP, Formaldehyde-p-diazodiphenylammonium sulfate-p-hydroxybenzoic acid copolymer, reaction products with zinc chloride and ammonium hexafluorophosphate

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)

(presensitized lithog. plate using surface-treated aluminum support) 37321-70-3, AA 1050

RL: DEV (Device component use); PRP (Properties); USES (Uses)

(presensitized lithog. plate using surface-treated aluminum support)

IT 11099-06-2D, Ethyl silicate, hydrolyzed

RL: DEV (Device component use); USES (Uses)

(undercoat layer; presensitized lithog. plate using surface-treated aluminum support)

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L48
    ANSWER 47 OF 78 CA COPYRIGHT 2003 ACS
     132:129957 CA
AN
TI
     Lithographic printing plate containing
     photopolymerizable monomer/prepolymer and photothermal
     conversion agent and its manufacture
IN
     Kojima, Yasuo; Hiraoka, Saburo; Kuroki, Takaaki
    Konica Co., Japan
Jpn. Kokai Tokkyo Koho, 11 pp.
PA
so ·
     CODEN: JKXXAF
DT
     Patent
T.A
     Japanese
IC
     ICM G03F007-00
     ICS B41M001-06; B41N001-14; G03F007-004; G03F007-027; G03F007-028
CC
     74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
     -----
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                                           -----
                    A2
     JP 2000035661
                           20000202
PΙ
                                           JP 1998-204995 19980721
PRAI JP 1998-204995
                           19980721
     The plate comprises a substrate having thereon a layer contg. a
     hydrophilic self-film-forming filler, a photopolymerizable
     lipophilic thermoplastic monomer/prepolymer, a polymn. initiator, and a
     photothermal conversion agent and a layer contg. a hydrophilic
     binder in succession. The plate is manufd. by overall exposing by active
     light after imagewise exposure by high-intensity light with absorption
     wavelength of the photothermal conversion agent to increase mol.
     wt. of the monomer/prepolymer. The plate shows improved printability,
     preventing stains in nonimage areas, pressure fog, finger prints, and
     blanket stains.
ST
     lithog printing plate lipophilic thermoplastic resin hydrophilic binder
IT
     Silica gel, uses
     RL: DEV (Device component use); USES (Uses)
        (Syloid 435; lithog. printing plate contq. photopolymerizable
        monomer/prepolymer and photothermal conversion agent)
IT
     Lithographic plates
        (presensitized; lithog. printing plate contg.
       photopolymerizable monomer/prepolymer and photothermal
       conversion agent)
IT '
     184973-22-6, CY 10
     RL: DEV (Device component use); USES (Uses)
        (IR absorber; lithog. printing plate contq.
       photopolymerizable monomer/prepolymer and photothermal
       conversion agent)
IT
     104922-10-3, GL 05
     RL: DEV (Device component use); USES (Uses)
        (hydrophilic binder; lithog, printing plate contg.
       photopolymerizable monomer/prepolymer and photothermal
       conversion agent)
IT
     188653-13-6, Snowtex S
     RL: DEV (Device component use); USES (Uses)
        (hydrophilic self-film-forming agent; lithog. printing plate contg.
       photopolymerizable monomer/prepolymer and photothermal
       conversion agent)
TT
     88004-52-8
     RL: CAT (Catalyst use); USES (Uses)
        (lithog. printing plate contg. photopolymerizable
       monomer/prepolymer and photothermal conversion agent)
     9003-20-7D, Polyvinyl acetate, hydrolyzed
IT
                                                25852-47-5, NK Ester 23G
    RL: DEV (Device component use); USES (Uses)
        (lithog. printing plate contg. photopolymerizable
       monomer/prepolymer and photothermal conversion agent)
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ANSWER 44 OF 78 CA COPYRIGHT 2003 ACS
ΔN
     132:258177 CA
     Photopolymerizable image-forming material for
ΤT
     lithographic plate
     Urano, Toshiyoshi; Hino, Etsuko; Nagao, Takumi
IN
PA
     Mitsubishi Chemical Industries Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 30 pp.
     CODEN: JKXXAF
DT
     Patent
     Japanese
LΑ
     ICM G03F007-027
IC
     ICS G03F007-00; G03F007-029; G03F007-09
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                          APPLICATION NO. DATE
     -----
                      _ _ _ _
                           ______
                                           -----
                                          JP 1998-257893
     JP 2000089455
                      A2
                            20000331
                                                           19980911
PΤ
PRAI JP 1998-257893
                            19980911
     MARPAT 132:258177
os
     The title image-forming material possesses, on a support having a surface
AB
     where the gum-tape pressure-stuck thereon shows a peeling strength of
     .ltoreq.500 g/cm, a layer made of a photopolymg. compn. contg.
     (i) an ethylenic unsatd. compd., a cyanine dye cation in which
     heterocycles link via a polymethine chain, and an org. B anion or (ii) an
     ethylenic unsatd. compd., a salt of the cyanine dye cation and a counter
     anion other than org. B anion, and a halomethyl-contg. compd. The
     material shows high sensitivity toward near IR region and
     non-sensitive to UV region, good storage stability, and processability
     under white fluorescent light.
ST
     IR sensitive lithog plate cyanine dye; org boron compd
     presensitized lithog plate; ethylenic compd presensitized lithog plate;
     halomethyl compd photopolymerizable compn
ΙT
     Lithographic plates
        (presensitized; presensitized lithog, plate contg. ethylenic compd.,
        cyanine dye, and org. boron compd. or halomethyl compd.)
IT
                3584-23-4, 2-(p-Methoxyphenyl)-4,6-bis(trichloromethyl)-s-
                24305-03-1 32435-46-4, Bis(methacryloyloxyethyl) phosphate
     triazine
     42573-57-9, 2-(p-Methoxystyryl)-4,6-bis(trichloromethyl)-s-triazine
     52628-03-2, Methacryloyloxyethyl phosphate
                                                 69432-40-2
                                                              77001-81-1
                117522-01-7, Tetramethylammonium butyltriphenylborate
                   191726-37-1, Tetramethylammonium butyltris(2,6-
     119235-84-6
     difluorophenyl)borate 193687-63-7
                                           211796-67-7
                                                        211796-69-9
                  220271-46-5
     219537-49-2
                               262380-41-6
     RL: DEV (Device component use); USES (Uses)
        (presensitized lithog. plate contq. ethylenic compd., cyanine dye, and
        org. boron compd. or halomethyl compd.)
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T.48

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L48 ANSWER 42 OF 78 CA COPYRIGHT 2003 ACS
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AN 132:258189 CA

TI Near-IR sensitive polymerizable composition for lithographic plate

IN Urano, Toshiyoshi; Hino, Etsuko

PA Mitsubishi Chemical Industries Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 37 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G03F007-027

ICS C08F002-50; G03F007-00; G03F007-004; G03F007-028; G03F007-031

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000098603	A2	20000407	JP 1998-272845	19980928
PRAT	TP 1998-272845		19980928		

AB The near-IR sensitive polymerizable compn. for lithog. plate has an ethylenic unsatd. compd., a cyanine dye cation with heterocyclic rings connected through a polymethine chain, an org. borate anion, and an aliph. amino acid, an aliph. amino acid ester, or a dipole ion of aliph. amino acid or the ester. The compn. provides the high sensitivity towards near-IR light, the excellent stability over time, and the insensitivity towards UV light.

ST near IR sensitive photopolymerizable compn lithog plate

IT Lithographic plates

(near-IR sensitive polymerizable compn. for lithog. plate)

```
T.48
     ANSWER 34 OF 78 CA COPYRIGHT 2003 ACS
     134:200564 CA
ΔN
     Photopolymerizable composition containing specific dye for
TI
     light-sensitive lithographic original plate
IN
     Urano, Toshiyuki
     Mitsubishi Chemical Corporation, Japan
PA
SO
     PCT Int. Appl., 59 pp.
     CODEN: PIXXD2
DΤ
     Patent
     Japanese
LA
     ICM G03F007-028
TC
     ICS C08F002-48; G03F007-031; G03F007-00
CC
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 42
FAN.CNT 1
                      KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
                                          -----
                     ____
     -----
                                          WO 2000-JP5588
PΙ
     WO 2001014931
                      A1
                            20010301
                                                           20000821
        W: DE, US
     JP 2002023361 A2
                            20020123
                                          JP 2000-200400
                                                           20000703
     JP 2002023362
                     A2
                                          JP 2000-207841
                                                           20000710
                            20020123
     JP 2002090989 A2
US 2002114966 A1
                                          JP 2000-250764
                                                           20000822
                            20020327
                            20020822
                                          US 2002-79408
                                                           20020222
PRAI JP 1999-235216 A
                            19990823
     JP 2000-200400 A
                            20000703
     JP 2000-207841
                      Α
                            20000710
     JP 2000-207842 A
                            20000710
     WO 2000-JP5588
                      A1
                            20000821
os
     MARPAT 134:200564
AB
     The photopolymerizable compn. for a light-sensitive lithog.
     original plate comprises a layer of contq.: (A) An ethylenic compd. (B) a
     dye selected from the group consisting of the dyes, which each has a basic
     structure comprising heteroatoms bonded to each other through a
     polymethine chain and has a specific substituent on the polymethine chain
     or on another basic structure; and (C) A photopolymn. initiator
     on a support. The photopolymerizable compn. contg. the dye is
     highly sensitive to light not only in the visible region but in
     long-wavelength regions including the near IR region and not
     sensitive to light in the UV region and shows the excellent handling
     characteristics under daylight fluorescent lamps.
ST
     photopolymerizable compn lithog original plate
IT
     Dyes
         (dye in photopolymerizable compn. for
        photopolymerizable lithog. original plate)
IT
     Light-sensitive materials
       Lithographic plates
        (photopolymerizable compn. for photopolymerizable
        lithog. original plate)
                                              328064-01-3
·IT
     328063-81-6
                   328063-88-3
                                 328063-95-2
                                                            328064-07-9
     328064-13-7
                   328064-16-0
                                 328064-20-6
     RL: TEM (Technical or engineered material use); USES (Uses)
         (dye in photopolymerizable compn. for
        photopolymerizable lithog. original plate)
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
 (1) Fuji Photo Film Co Ltd; JP 11119421 A 1999 CA
 (2) Konica Corporation; JP 08114916 A 1996 CA
 (3) Mitsubishi Chemical Corporation; JP 11119428 A 1999 CA
```

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ANSWER 33 OF 78 CA COPYRIGHT 2003 ACS
L48
AN
     134:259221 CA
     Photopolymerizable composition and IR laser-sensitive
ΤI
     material using it for lithographic plates
     Takasaki, Ryuichiro; Urano, Toshiyoshi
IN
     Mitsubishi Chemical Corp., Japan
PΑ
     Jpn. Kokai Tokkyo Koho, 15 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
     ICM G03F007-029
IC
     ICS C08F002-50; G03F007-004; G03F007-027
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
     _____
                     ---- -----
                                           -----
     JP 2001075276
                     A2
                           20010323
                                          JP 1999-249482 19990903
PRAI JP 1999-249482
                           19990903
     MARPAT 134:259221
     The compn. contains (A) addn.-polymerizable ethylenically unsatd. compds.,
     (B) IR-absorbing dyes, and (C) org. B complexes A1A2A2A4B-X+ (A1
     = alkyl; A2-A4 = arom. group having electron-withdrawing group; X+ =
     counter cation) as photopolymn. initiators. The IR
     laser-sensitive material comprises a support coated with the above compn.
     The compn. shows high sensitivity to IR laser beams to give
     lithog. printing plates with high resoln. (dot reprodn.) and no stains.
     IR laser sensitive lithog printing plate; borate complex
ST
     photopolymn initiator lithog plate
IT
     Lithographic plates
        (IR laser-sensitive material contq.
        photopolymerizable compn. for lithog. plates)
IT
     Polymerization catalysts
        (photopolymn., borate complexes; IR laser-sensitive
        material contg. photopolymerizable compn. for lithog. plates)
IT
     25086-15-1P, Methacrylic acid-methyl methacrylate copolymer
     203742-63-6P, Acrylic acid-styrene copolymer ester with
     (3,4-epoxycyclohexyl) methyl acrylate
     RL: DEV (Device component use); PNU (Preparation, unclassified); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (IR laser-sensitive material contg.
        photopolymerizable compn. for lithog. plates)
     56361-55-8, A-BPE 4 95971-16-7, UA 306H
TΤ
     RL: DEV (Device component use); TEM (Technical or engineered material
     use); USES (Uses)
        (IR laser-sensitive material contg.
        photopolymerizable compn. for lithog. plates)
TΤ
     193687-63-7 220271-46-5
     RL: DEV (Device component use); MOA (Modifier or additive use); USES
     (Uses)
        (IR-absorbing dye; IR laser-sensitive material
        contg. photopolymerizable compn. for lithog. plates)
IT
     330804-59-6 330804-60-9
     RL: CAT (Catalyst use); USES (Uses)
        (photopolymn. initiator; IR laser-sensitive
        material contg. photopolymerizable compn. for lithog. plates)
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L48
    ANSWER 31 OF 78 CA COPYRIGHT 2003 ACS
AN
    135:68543 CA
    Method for formation of negative images by imagewise irradiation of
ΤI
     infrared laser
    Aoshima, Keitaro
IN
    Fuji Photo Film Co., Ltd., Japan
PA
     Jpn. Kokai Tokkyo Koho, 21 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
     ICM G03F007-38
IC
     ICS G03F007-30
     74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
     Section cross-reference(s): 35, 38
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     -----
                                         ______
    JP 2001175006
                    A2 20010629
                                         JP 1999-362335 19991221
PRAI JP 1999-362335
                           19991221
    Neq. image-forming material consisting of a support having a
     photosensitive layer contq. (A) IR absorber, (B) radical
     generator, (C) radically polymerizable compd., and (D) binder polymer
     irradiated by imagewise exposure with IR laser, 1-20 s heat
     treatment at 60-120.degree., and aq. alk. development to give neg. images.
     The materials are suitable for digital direct printing plates.
     digital direct printing plate photoimaging compn; IR
     absorber photopolymn compn imagewise irradn; neg image
     photopolymn compn IR laser
TT
     Optical materials
        (IR absorbers; formation of neg. images suitable as digital
        direct printing plates by imagewise IR irradn.)
IT
     IR materials
        (absorbers; formation of neq. images suitable as digital direct
        printing plates by imagewise IR irradn.)
IT
     IR laser radiation
       Lithographic plates
        (formation of neg. images suitable as digital direct printing plates by
        imagewise IR irradn.)
IT
     Photoimaging materials
        (photopolymerizable; formation of neg. images suitable as
        digital direct printing plates by imagewise IR irradn.)
IT
     Onium compounds
     RL: TEM (Technical or engineered material use); USES (Uses)
        (radical generator; formation of neg. images suitable as digital direct
        printing plates by imagewise IR irradn.)
IT
     134127-48-3
     RL: TEM (Technical or engineered material use); USES (Uses)
        (IR absorbing agent; formation of neg. images suitable as
        digital direct printing plates by imagewise IR irradn.)
IT
     29570-58-9, Dipentaerythritol hexaacrylate 90216-38-9, Allyl
     methacrylate-methacrylic acid copolymer
     RL: PEP (Physical, engineering or chemical process); TEM (Technical or
     engineered material use); PROC (Process); USES (Uses)
        (formation of neg. images suitable as digital direct printing plates by
        imagewise IR irradn.)
TΤ
     335612-65-2, Victoria pure blue naphthalenesulfonate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (formation of neg. images suitable as digital direct printing plates by
        imagewise IR irradn.)
TΤ
     262612-33-9
     RL: TEM (Technical or engineered material use); USES (Uses)
        (radical generator; formation of neg. images suitable as digital direct
       printing plates by imagewise IR irradn.)
```

GLEN AND BUILDING SHAP

ANSWER 30 OF 78 CA COPYRIGHT 2003 ACS L48 135:350408 CA AN Laser diode (LD) imaging and photopolymers for LD imaging ΤI ΑU Urano, Toshiyuki Research Center, Mitsubishi Chemical Corp., Aoba-ku, Yokohama, 227, Japan CS SO Proceedings of SPIE-The International Society for Optical Engineering (2001), 4274 (Laser Applications in Microelectronic and Optoelectronic Manufacturing VI), 18-28 CODEN: PSISDG; ISSN: 0277-786X PΒ SPIE-The International Society for Optical Engineering DTJournal LA English CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 73, 76 The laser photopolymers and the laser imaging systems equipped AB with various laser diodes such as 410 nm-Violet laser, 532 nm-frequency-doubled laser and high-power- IR laser are presented. The photopolymer's performances in sensitivity, resoln. and safelight character dependent on the wavelength and power of laser light are discussed. STlaser diode imaging photopolymer ΙT IR lasers Imaging Lithography (laser diode imaging and photopolymers for laser diode imaging) IT Polymers, uses RL: TEM (Technical or engineered material use); USES (Uses) (photo; laser diode imaging and photopolymers for laser diode imaging)

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Nagasaka, H; Mitsubishi Kasei R and D 1992, V1, P52
- (2) Urano, T; Japan Printer 2000, V11, P19

RE.CNT 2

```
ANSWER 24 OF 78 CA COPYRIGHT 2003 ACS
AN
    136:332792 CA
ΤI
     IR laser heat mode type negative working lithographic
    printing plate master
    Shimada, Kazuto; Nakamura, Ippei; Sorori, Tadahiro
IN
     Fuji Photo Film Co., Ltd., Japan
PA
SO
    Jpn. Kokai Tokkyo Koho, 25 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
    ICM G03F007-029
IC
     ICS B41N001-14; G03F007-00; G03F007-004; G03F007-027
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
     Reprographic Processes)
FAN.CNT 1
                     KIND DATE
    PATENT NO.
                                          APPLICATION NO. DATE
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                                          ______
     JP 2002116539
                      A2
                                          JP 2000-310808
PΙ
                           20020419
                                                           20001011
PRAI JP 2000-310808
                           20001011
    MARPAT 136:332792
    The title heat mode type neg. working lithog. printing plate master
AΒ
     contains (A) an onium type polymn. initiator, (B) a photothermal
     conversion compd., (C) a polymerizable compd., and (D) a borate compd.
     represented by Ar4B-M+ (M+ = cation; Ar = arom.) in a
    photosensitive layer. The printing plate master shows excellent
     sensitivity and storage stability.
ST
     IR laser heat mode neg working lithog printing plate
IT
    Lithographic plates
        (IR laser heat mode type neg. working lithog. printing plate
       master)
IT
    Photoimaging materials
        (photopolymerizable; IR laser heat mode type neq.
       working lithog. printing plate master)
IT
              15522-59-5
                           15525-15-2
                                         26985-34-2
                                                      108479-75-0
     144699-38-7
                  146761-08-2
                                153347-65-0
                                              159123-85-0
                                                           412267-88-0
     412267-90-4
                  412267-92-6
                                412267-93-7
                                              412267-95-9
                                                            412267-96-0
    RL: DEV (Device component use); MOA (Modifier or additive use); USES
     (Uses)
        (borate compd. in photosensitive layer of IR laser
       heat mode type neg. working lithog. printing plate master to improve
       sensitivity as well as storage stability)
IT
     134127-48-3
                  173783-73-8
                                244606-76-6
    RL: DEV (Device component use); USES (Uses)
        (photothermal conversion compd. in photosensitive
        layer of IR laser heat mode type neg. working lithog.
       printing plate master to improve sensitivity as well as storage
       stability)
     4986-89-4, Pentaerythritol tetraacrylate
ΙT
                                               139385-71-0, Glycerin
     dimethacrylate-hexamethylene diisocyanate copolymer
     RL: DEV (Device component use); USES (Uses)
        (polymerizable compd. in photosensitive layer of IR
       laser heat mode type neg. working lithog. printing plate master to
       improve sensitivity as well as storage stability)
ΙT
     19600-49-8
                 25183-63-5
                              57835-99-1 66003-76-7
                                                       66003-78-9
     398141-25-8
                  412043-42-6
                                412043-43-7
    RL: CAT (Catalyst use); USES (Uses)
        (polymn. initiator in photosensitive layer of IR
       laser heat mode type neg. working lithog. printing plate master to
       improve sensitivity as well as storage stability)
```

T.4 R

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L48
    ANSWER 23 OF 78 CA COPYRIGHT 2003 ACS
AN
    136:361831 CA
TI
    Photosensitive lithographic printing plate
IN
    Oshima, Yasuhito
PA
    Fuji Photo Film Co., Ltd., Japan
    Eur. Pat. Appl., 49 pp.
SO
    CODEN: EPXXDW
DT
    Patent
LΑ
    English
IC
    ICM G03F007-033
     ICS B41C001-10
     74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
    Reprographic Processes)
FAN.CNT 3
                                          APPLICATION NO. DATE
    PATENT NO.
                     KIND DATE
                                          -----
     _____
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                     A1 20020508
    EP 1204000
                                         EP 2001-125486 20011106
PТ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          JP 2000-337688
                                                           20001106
     JP 2002139828
                     A2
                           20020517
                                          CN 2001-134562
                      Α
                           20020612
                                                           20011106
     CN 1353340
PRAI JP 2000-337688
                     Α
                           20001106
    A photosensitive lithog. printing plate is described which is
    useful for direct-laser write applications and provides durable prints
     under high productivity conditions. The plate contains a
     photosensitive layer contg. a poly(vinyl alc.) resin binder
     modified with an acetal skeleton comprising an aliph. cyclic structure.
     The photosensitive also contains: a photopolymn.
     initiator, a heat polymn. initiator, an addn. polymerizable compd., a
     sensitizer dye, a co-sensitizer dye, a color pigment, a fluorine-based
     surfactant, an IR absorber.
ST
     photosensitive lithog printing plate acetal modified polyvinyl
     alc binder; aliph cyclic structure modified polyvinyl alc binder printing
    plate
TT
     Lithographic plates
        (neg.-working presensitized; lithog. printing plate for direct-write
        with photosensitive layer contg. poly(vinyl alc.) binder
        modified with acetal skeleton having aliph. cyclic structure)
IT
     Polyurethanes, uses
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating binder mixt.; lithog. printing plate
        for direct-write with photosensitive layer contg. poly(vinyl
        alc.) binder modified with acetal skeleton having aliph. cyclic
        structure)
IT
     64-02-8
               102-71-6, Triethanolamine, uses
                                              141-43-5, Monoethanolamine,
           298-14-6
                     1312-76-1, Potassium silicate 1321-69-3 5968-11-6,
     Sodium carbonate monohydrate
                                   7757-83-7, Sodium sulfite 25417-20-3,
     Sodium dibutylnaphthalene sulfonate
                                          25638-17-9
                                                       28348-64-3, Sodium
     isopropylnaphthalene sulfonate
                                     126305-25-7
                                                   421557-82-6
     RL: NUU (Other use, unclassified); USES (Uses)
        (developer compn.; lithog. printing plate for direct-write with
       photosensitive layer contg. poly(vinyl alc.) binder modified
       with acetal skeleton having aliph. cyclic structure)
IT
     134127-48-3
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating IR absorber; lithog.
       printing plate for direct-write with photosensitive layer
       contq. poly(vinyl alc.) binder modified with acetal skeleton having
       aliph. cyclic structure)
IT
     4986-89-4, NK ester A-TMMT
                                 29570-58-9, NK ester A-9530
                                                               139385-71-0, US
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating addn. polymerizable compd.; lithog.
       printing plate for direct-write with photosensitive layer
```

```
contg. poly(vinyl alc.) binder modified with acetal skeleton having
        aliph. cyclic structure)
     90216-38-9, Allyl methacrylate-methacrylic acid copolymer
IT
     Methyl methacrylate-acrylonitrile-N-[(4-sulfamoyl)phenyl]methacrylamide
                 293329-29-0, MDI-HMDI-polypropylene glycol-2,2-
     bis(hydroxymethyl)propionic acid copolymer
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating binder mixt.; lithog. printing plate
        for direct-write with photosensitive layer contg. poly(vinyl
        alc.) binder modified with acetal skeleton having aliph. cyclic
        structure)
     85-42-7D, 1,2-Cyclohexanedicarboxylic anhydride, reaction products with
TΤ
     poly(vinyl alc.) and cyclohexanecarboxy aldehyde
                                                        2043-61-0D,
     Cyclohexanecarboxaldehyde, reaction product with poly(vinyl alc.) and
     cyclohexanedicarboxylic anhydride
                                         9002-89-5D, Poly(vinyl alcohol),
     sapond., reaction product with cyclohexanecarboxy aldehyde and
     cyclohexanedicarboxylic anhydride
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating binder; lithog. printing plate for
        direct-write with photosensitive layer contg. poly(vinyl
        alc.) binder modified with acetal skeleton having aliph. cyclic
        structure)
IT
     583-39-1
                120307-06-4
                              293329-35-8
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating co-initiator; lithog. printing plate
        for direct-write with photosensitive layer contg. poly(vinyl
        alc.) binder modified with acetal skeleton having aliph. cyclic
        structure)
IT
     120457-86-5
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating heat polymn. inhibitor; lithog.
        printing plate for direct-write with photosensitive layer
        contg. poly(vinyl alc.) binder modified with acetal skeleton having
        aliph. cyclic structure)
TТ
     13891-29-7
                  220476-51-7
                                262612-33-9
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating heat polymn. initiator; lithog.
        printing plate for direct-write with photosensitive layer
        contg. poly(vinyl alc.) binder modified with acetal skeleton having
        aliph. cyclic structure)
TT
     125051-32-3
                   125407-19-4
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating photopolymn. initiator;
        lithog. printing plate for direct-write with photosensitive
        layer contg. poly(vinyl alc.) binder modified with acetal skeleton
        having aliph. cyclic structure)
IT
     118234-41-6
                   421548-66-5
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating sensitizer dye; lithog. printing
        plate for direct-write with photosensitive layer contg.
        poly(vinyl alc.) binder modified with acetal skeleton having aliph.
        cyclic structure)
ΙT
     85568-56-5, Megafac F-177
                                 335612-65-2, Victoria pure blue
     naphthalenesulfonate
     RL: DEV (Device component use); USES (Uses)
        (photosensitive coating; lithog. printing plate for
        direct-write with photosensitive layer contq. poly(vinyl
        alc.) binder modified with acetal skeleton having aliph. cyclic
        structure)
IT
     9002-89-5, Poly(vinyl alcohol)
     RL: DEV (Device component use); USES (Uses)
        (protective film; lithog. printing plate for direct-write with
        photosensitive layer contg. poly(vinyl alc.) binder modified
        with acetal skeleton having aliph. cyclic structure)
```

- IT 86468-54-4, Ethyl methacrylate-sodium 2-acrylamido-2-methyl-1-propanesulfonate copolymer 141087-50-5, 3-Methacryloxypropyl trimethoxysilane-Tetraethoxysilane copolymer 142938-52-1 RL: DEV (Device component use); USES (Uses) (substrate interlayer sol compn.; lithog. printing plate for direct-write with photosensitive layer contg. poly(vinyl alc.) binder modified with acetal skeleton having aliph. cyclic structure)

- (1) American Hoechst Corporation; EP 0211406 A 1987 CA
- (2) Hitachi Ltd; JP 06122713 A 1994 CA
- (3) Mitsubishi Chem Ind Ltd; JP 58134629 A 1983 CA
- (4) Sekisui Kagaku Kogyo Kabushiki Kaisha; EP 0150293 A 1985 CA

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L48
    ANSWER 22 OF 78 CA COPYRIGHT 2003 ACS
AN
     136:377522 CA
TI
     Negative-working IR-sensitive photopolymerizable
     image-forming material, image formation, and presensitized
     photopolymerizable lithographic plate
IN
     Okamoto, Hideaki
PΑ
     Mitsubishi Chemical Corp., Japan
SO
     Jpn. Kokai Tokkyo Koho, 14 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM G03F007-11
     ICS B41N001-14; G03F007-00; G03F007-004
     74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other
CC
     Reprographic Processes)
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
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                                           -----
     JP 2002139843
                      A2
                           20020517
                                           JP 2000-336815 20001106
PΙ
                           20001106
PRAI JP 2000-336815
     In the image-forming material comprising (a) a support, (b) a
     photopolymerizable compn. layer contg. an ethylenic monomer, a
     sensitizing dye absorbing a light of 650-1300 nm, and a radical-generating
     agent, and (c) a protective layer; the protective layer contains 30-90
     wt.% of polyvinyl alc. The image-forming material is image-wise exposed
     with the light and developed with an alkali developer to form the image.
     Also claimed is a photopolymerizable lithog. plate employing the
     material and Al as a support. The image-forming material shows high
     sensitivity to IR and can be used under the irradn. circumstance
     of a visible white safelight.
ST
     IR photoimaging material protective coating polyvinyl
     alc; photopolymerizable lithog plate protective coating
     polyvinyl alc
IT
     Photoimaging materials
        (neg. working; neg.-working IR-sensitive
        photopolymerizable image-forming material for
        photopolymerizable lithog. plate)
ΙT
     Lithographic plates
        (neg.-working IR-sensitive photopolymerizable
        image-forming material for photopolymerizable lithog. plate)
     Polyethers, preparation
IT
     RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (polyamide-polyester-, lithog. plate; neg.-working IR
        -sensitive photopolymerizable image-forming material for
        photopolymerizable lithog. plate)
IT
     Polyesters, preparation
     RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (polyamide-polyether-, lithog. plate; neg.-working IR
        -sensitive photopolymerizable image-forming material for
        photopolymerizable lithog. plate)
IT
     Polyamides, preparation
     RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (polyester-polyether-, lithog. plate; neg.-working IR
        -sensitive photopolymerizable image-forming material for
       photopolymerizable lithog. plate)
IT
     Coating materials
        (vinyl alc.-contg.; neg.-working IR-sensitive
        photopolymerizable image-forming material for
       photopolymerizable lithog. plate)
IT
     425380-41-2P
```

```
RL: DEV (Device component use); IMF (Industrial manufacture); PREP
     (Preparation); USES (Uses)
        (lithog. plate; neg.-working IR-sensitive
       photopolymerizable image-forming material for
       photopolymerizable lithog. plate)
IT
     32435-46-4
                64401-02-1
                              77001-81-1
     RL: TEM (Technical or engineered material use); USES (Uses)
        (neg.-working IR-sensitive photopolymerizable
        image-forming material for photopolymerizable lithog. plate)
     9002-89-5, GL 03
                        9003-39-8, Luviskol K 30 25213-24-5, Vinyl
IT
     acetate-vinyl alcohol copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (protective layer component; neg.-working IR-sensitive
        photopolymerizable image-forming material for
       photopolymerizable lithog. plate)
IT
     3584-23-4
     RL: TEM (Technical or engineered material use); USES (Uses)
        (radical-generating agent; neg.-working IR-sensitive
        photopolymerizable image-forming material for
        photopolymerizable lithog. plate)
     425380-40-1
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (sensitizing dye; neg.-working IR-sensitive
        photopolymerizable image-forming material for
        photopolymerizable lithog. plate)
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(FILE 'HOME' ENTERED AT 16:12:39 ON 30 APR 2003) FILE 'REGISTRY' ENTERED AT 16:12:51 ON 30 APR 2003 12 S CARBOXYPHENOXYACETIC ACID Ll 1 S HYDROQUINONE O O DIACETIC ACID L2L3 0 S CAROXY 0 ANISIC ACID 0 S CARBOXY 0 ANISIC ACID L4190 S CARBOXY AND ANISIC ACID L5 L6 2719 S ANISIC ACID 1 S ANISIC ACID/CN L7 L8 190 S CARBOXY AND ANISIC ACID L9 4 S RESORCINOL AND DIACETIC ACID L10 28918 S NAPHTHALENECARBOXYLIC ACID 6 S CARBOXYMETHYL AND THIO AND NAPHTHALENECARBOXYLIC ACID L110 S CARBOXYMETHYLTHIO ADJ BENZOIC ACID L12 L13 18 S CARBOXYMETHYLTHIO AND BENZO? FILE 'CA' ENTERED AT 16:23:05 ON 30 APR 2003 S 101714-12-9/REG# FILE 'REGISTRY' ENTERED AT 16:23:09 ON 30 APR 2003 L14 1 S 101714-12-9/RN FILE 'CA' ENTERED AT 16:23:09 ON 30 APR 2003 L15 2 S L14 L16 62628 S PHOTO? AND (IR OR INFRARED OR INFRA RED) L1734 S L16 AND CARBOXYMETHYL FILE 'REGISTRY' ENTERED AT 16:26:23 ON 30 APR 2003 ' 0 S DIANISIDINE AND N AND TETRAACETIC ACID L18 L19 O S DIANISIDINE AND TETRAACETIC ACID L20 O S DIANISIDINE AND ACETIC ACID L21 10 S DIANISIDINE AND ACID L22 41 S DIANISIDINE 7351 S N CARBOXYMETHYL AND GLYCINE L23L242193 S L23 AND PHENYL L25 · 28 S N CARBOXYMETHYL AND PHENYL GLYCINE L26 1 S 1147-65-5 FILE 'CA' ENTERED AT 16:44:05 ON 30 APR 2003 L27 98 S L26 L28 25 S L27 AND PHOTO? L29 1 S L28 AND (IR OR INFRARED OR INFRA RED) L30 24 S L28 NOT L29 L31 565336 S IR OR INFRARED OR INFRA RED L32 954 S CARBOXYMETHYL AND L31 L33 34 S L32 AND PHOTO? L34 0 S L33 AND LITHOGRAPH? L35 34 S L33 NOT L30 E MUNNELLY H/IN L36 1 S E4 E MUNNELLY H/AU L37 8 S E4-E6 E WEST P/AU, IN L38 55 S E3-4 E WEST PAUL/AU, IN L39 15 S E3-4 L40 70 S L39 OR L38 L41 5 S L40 AND (IR OR INFRARED OR INFRA RED) L42 1364 S LITHOGRAPH? AND (IR OR INFRARED OR INFRA RED) L43 827 S L42 AND PHOTO? L44 67 S L43 AND POLYMERIZ?

L45 0 S CARBOXY AND METHYL AND L44 L46 1 S L43 AND DAYLIGHT

=> s 143 and day light 443337 DAY

780319 LIGHT

339 DAY LIGHT

(DAY(W)LIGHT)

L47 0 L43 AND DAY LIGHT

=> s 143 and photopolym?

22404 PHOTOPOLYM?

L48 78 L43 AND PHOTOPOLYM?